IN THE CLAIMS

The following is a listing of the claims in accordance with 37 C.F.R. §1.121.

1.   (previously presented)An interactive graphics-based system for performing a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising:

a processor for executing instructions;

a memory for storing instructions and data;

a display device; and

an interactive graphics-based tool, comprising:

a hierarchical representation component that organizes the system and the plurality of subsystems and components into a hierarchical representation;

an interactive selection component that provides a plurality of options for analyzing the hierarchical representation;

a reliability analysis component, responsive to the hierarchical representation component and the interactive selection component, that performs a reliability analysis at any level of the hierarchical representation; and

a visualization component that provides a movie mode display of the reliability analysis.

2.   (previously presented)The system according to claim 1, wherein the hierarchical representation generated by the hierarchical representation component takes the form of a tree structure wherein the system and plurality of subsystems and components are represented in the tree structure by a node.

3.   (previously presented)The system according to claim 2, wherein the plurality of options provided by the interactive selection component comprises at least

one of moving about the hierarchical representation, selecting a node and defining a group of nodes.

4.   (previously presented)The system according to claim 1, wherein the reliability analysis component performs at least one of a statistical analysis, reliability prediction, life cycle cost analysis, maintenance projection, and inventory forecasting.

5. – 11.   (canceled).

12.   (previously presented)A graphics-based system for performing a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising:

a processor for executing instructions;

a memory for storing instructions and data;

a display device; and

a graphics-based tool, comprising:

means for organizing the system and the plurality of subsystems and components into a hierarchical representation;

means for providing a plurality of options for analyzing the hierarchical representation;

means, responsive to the organizing means and the providing means, for performing a reliability analysis at any level of the hierarchical representation; and

means for generating a visualization of the reliability analysis in a movie mode display.

13.   (previously presented)The system according to claim 12, wherein the hierarchical representation generated by the organizing means takes the form of a tree structure wherein the system and plurality of subsystems and components are represented in the tree structure by a node.

14.   (previously presented)The system according to claim 13, wherein the plurality of options provided by the providing means comprises at least one of moving about the hierarchical representation, selecting a node and defining a group of nodes.

15.   (previously presented)The system according to claim 12, wherein the reliability analysis means performs at least one of a statistical analysis, reliability prediction, life cycle cost analysis, maintenance projections, and inventory forecasting.

16.   (currently amended)   A system for performing an analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising:

a processor for executing instructions;

a memory for storing instructions and data;

a display device; and

a data repository containing a plurality of service data for the system;

an interactive data preprocessor that preprocesses the plurality of service data in accordance with a user specified reliability analysis selection; and

an interactive graphics-based tool for performing the user specified reliability analysis on the system in accordance with the plurality of service data, the interactive graphics-based tool comprising a hierarchical representation component that organizes the system and the plurality of subsystems and components into a hierarchical representation; an interactive selection component that provides a plurality of options for analyzing the hierarchical representation; a statistical analysis component, responsive to the hierarchical representation component and the interactive selection component, that performs a statistical analysis at any level of the hierarchical representation; and a visualization component that provides a movie mode display of the statistical analysis.

17.   (original)   The system according to claim 16, further comprising an expert system that assists the interactive graphics-based tool in performing the reliability analysis.

18.   (original)   The system according to claim 16, wherein the data preprocessor performs at least one of determining censoring times, filtering data and segmenting data.

19.   (currently amended)   A system for performing an analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising:

a data repository containing a plurality of service data for the system;

an interactive graphics-based tool for performing a statistical analysis on the system in accordance with the plurality of service data, the interactive graphics-based tool comprising a hierarchical representation component that organizes the system and the plurality of subsystems and components into a hierarchical representation; an interactive selection component that provides a plurality of options for analyzing the hierarchical representation; a statistical analysis component, responsive to the hierarchical representation component and the interactive selection component, that performs a statistical analysis at any level of the hierarchical representation; and a visualization component that provides a movie mode display of the statistical analysis; and

a first computing unit configured to serve the data repository and the interactive graphics-based tool.

20.   (original)   The system according to claim 19, wherein the data repository stores historical failure data for the system.

21. (original) The system according to claim 19, further comprising a simulator that simulates the reliability of the plurality of service data in accordance with the statistical model.

22. (original) The system according to claim 19, further comprising an expert system that assists the interactive graphics-based tool in performing the statistical analysis.

23. (original) The system according to claim 19, further comprising a data preprocessor that preprocesses the plurality of service data.

24. (original) The system according to claim 19, further comprising a second computing unit configured to interact with the data repository and the interactive graphics-based tool served from the first computing unit over a network.

25. (previously presented) A computer-implemented method for performing a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising computer-implemented steps for:

organizing the system and the plurality of subsystems and components into a hierarchical representation;

providing a plurality of options for analyzing the hierarchical representation;

performing a reliability analysis at any level of the hierarchical representation; and

providing a visualization of the reliability analysis as a movie mode display.

26. (original) The method according to claim 25, wherein the hierarchical representation takes the form of a tree structure wherein the system and plurality of subsystems and components are represented in the tree structure by as a node.

27.   (original)   The method according to claim 26, wherein the plurality of options comprises at least one of moving about the hierarchical representation, selecting a node and defining a group of nodes.

28.   (original)   The method according to claim 25, wherein the performing a reliability analysis comprises performing at least one of a statistical analysis, reliability prediction, life cycle cost analysis, maintenance projections, and inventory forecasting.

29. – 35.   (canceled).

36.   (currently amended)   A computer-implemented method for performing a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising computer-implemented steps for:

storing a plurality of service data for the system;

preprocessing the plurality of service data in accordance with a user specified reliability analysis selection;

providing an interactive graphics-based tool for performing the user specified reliability analysis on the system in accordance with the plurality of service data, wherein the interactive graphics-based tool is configured to organize the system and the plurality of subsystems and components into a hierarchical representation, to provide a plurality of options for analyzing the hierarchical representation, and to perform a reliability analysis at any level of hierarchical representation; and

providing a visualization of the reliability analysis as a movie mode display.

37.   (original)   The method according to claim 36, wherein the preprocessing comprises performing at least one of determining censoring times, filtering data and segmenting data.

38.   (currently amended)   The method according to claim 36, _further_ _comprising performing a simulation,_ wherein the simulating predicts life cycle events and costs associated with each event.

39.   (previously presented)A computer-implemented method for enabling a user to perform a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising computer-implemented steps for:

prompting the user to organize the system and the plurality of subsystems and components into a hierarchical representation;

prompting the user to select from a plurality of analyzing options;

in response to the user selection, performing a reliability analysis at any level of the hierarchical representation; and

providing a visualization of the reliability analysis to the user in a movie mode display.

40.   (original)   The method according to claim 39, wherein the hierarchical representation takes the form of a tree structure wherein the system and plurality of subsystems and components are represented in the tree structure by a node.

41.   (original)   The method according to claim 40, wherein the plurality of options comprises at least one of moving about the hierarchical.representation, selecting a node and defining a group of nodes.

42.   (original)   The method according to claim 39, wherein the performing of the reliability analysis comprises performing at least one of a statistical analysis, reliability prediction, life cycle cost analysis, maintenance projections, and inventory forecasting.

43.   (previously presented)A computer-implemented method for enabling a user to perform a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, comprising computer-implemented steps for:

storing a plurality of service data for the system:

prompting the user to specify a reliability analysis selection;

preprocessing the plurality of service data in accordance with the user specified reliability analysis selection;

performing the user specified reliability analysis; and

providing a visualization of the reliability analysis as a movie mode display.

44.   (original)   The method according to claim 43, wherein the performing of the user specified reliability analysis comprises prompting the user to organize the system and the plurality of subsystems and components into a hierarchical representation.

45.   (previously presented)The method according to claim 44, wherein the performing of the user specified reliability analysis comprises prompting the user to select from a plurality of analyzing options for analyzing the hierarchical representation.

46.   (original)   The method according to claim 45, wherein the performing of the user specified reliability analysis comprises performing a reliability analysis at any level of the hierarchical representation in response to the user selection.

47.   (canceled).

48.   (original)   The method according to claim 43, further comprising performing a simulation.

49.   (original)   The method according to claim 48, wherein the simulating predicts life cycle events and costs associated with each event.

50.   (currently amended)   A computer-readable medium storing computer instructions which when executed on a computer perform a process for ~~instructing a computer system to~~ performing a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, the computer instructions implementing computer processing for:

    organizing the system and the plurality of subsystems and components into a hierarchical representation;

        providing a plurality of options for analyzing the hierarchical representation;

        performing a reliability analysis at any level of the hierarchical representation; and

        visualizing the reliability analysis in a movie mode display.

51.   (original)   The computer-readable medium according to claim 50, wherein the hierarchical representation takes the form of a tree structure wherein the system and plurality of subsystems and components are represented in the tree structure by a node.

52.   (original)   The computer-readable medium according to claim 51, wherein the plurality of options comprises at least one of moving about the hierarchical representation, selecting a node and defining a group of nodes.

53.   (original)   The computer-readable medium according to claim 50, wherein the performing of the reliability analysis comprises instructions for performing at least one of a statistical analysis, reliability prediction, life cycle cost analysis, maintenance projections, and inventory forecasting.

54.   (canceled).

55.   (currently amended)   A computer-readable medium storing computer instructions which when executed on a computer perform a process for ~~instructing a computer system to enable~~ enabling a user to perform a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, the computer instructions implementing computer processing for:

prompting the user to organize the system and the plurality of subsystems and components into a hierarchical representation;

prompting the user to select from a plurality of analyzing options;

in response to the user selection, performing a reliability analysis at any level of the hierarchical representation; and

providing a visualization of the reliability analysis to the user in a movie mode display.

56.   (currently amended)   A computer-readable medium storing computer instructions which when executed on a computer perform a process for ~~instructing a computer system to enable~~ enabling a user to perform a reliability analysis on a system having a plurality of subsystems and a plurality of components within each subsystem, the computer instructions implementing computer processing for:

storing a plurality of service data for the system;

prompting the user to specify a reliability analysis selection;

preprocessing the plurality of service data in accordance with the user specified reliability analysis selection;

performing the user specified reliability analysis; and

providing a visualization of the reliability analysis as a movie mode display.

57.   (original)   The computer-readable medium according to claim 56, further comprising instructions for performing a simulation.